

A hybrid ellipsis analysis of two types of fragments in Korean*

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Ahn, Hee-Don and Sungeun Cho. 2017. A hybrid ellipsis analysis of two types of fragments in Korean. *Linguistic Research* 34(3), 311-359. Nominal fragments in Korean can take two different forms: case-marked forms and caseless forms. Previous approaches to the two types of fragments are divided into two directions: uniform analyses and hybrid analyses. Uniform analyses are further classified into two species: direct interpretation approaches and ellipsis approaches. The direct interpretation approaches basically assume that fragments are non-sentential XPs. On this view, the unexpressed parts of the fragments' interpretation are supplied not through syntactic structure but via correspondence with the meaning of the antecedent sentence. The ellipsis approaches, by contrast, assume that fragments have sentential sources and are derived through deletion process. Hybrid analyses, on the other hand, suggest that some fragments involve sentential sources and that others are non-sentential XPs. We propose that both case-marked and caseless fragments involve movement and TP deletion but that their sentential sources are not identical—a hybrid ellipsis analysis. We show that parallel behaviors of two types of fragments are explained under the assumption that they have sentential sources, while non-parallel behaviors are explained because of their different sentential sources. Our analysis further offers fresh accounts for adnominal modifier fragments and their interesting contrasts. (Konkuk University · Yeungnam University)

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1. Introduction

Fragments have recently received a great deal of attention. One of the reasons is

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related to their mismatch between forms and interpretations. Fragments have propositional interpretation although they surface non-sentential XPs. Nominal fragments in Korean are interesting in that they occur in two different forms; namely, case-marked fragment (1b) and caseless fragment (1c).

- (1) a. Nwu-ka chayk-ul sa-ss-ni?
 Who-Nom book-Acc buy-Pst-Q
 ‘Who bought a book?’
 b. Yengswu-ka.
 Y.-Nom
 c. Yengswu.

Both of the fragments in (1b-c) are interpreted like a full sentence ‘Yengswu bought a book’. In order to account for the propositional interpretation of (1b-c), one may assume that (1b-c) are derived from their full sentential counterparts like (2a-b), respectively.

- (2) Q: Nwu-ka chayk-ul sa-ss-ni?
 Who-Nom book-Acc buy-Pst-Q
 ‘Who bought a book?’
 a. Yengswu-ka chayk-ul sa-ss-e.
 Y.-Nom book-Acc buy-Pst-Dec
 ‘Yenswu bought a book.’
 b. *Yengswu chayk-ul sa-ss-e.
 Y. book-Acc buy-Pst-Dec
 ‘Intended: Yenswu bought a book.’

However, the ill-formedness of (2b) as a reply to the question may lead to the conclusion that caseless fragment like (1c) may not have a sentential connection.¹

1 As indicated by a reviewer, although a full sentence is ill-formed, its elliptical counterpart can be well-formed. The cases are usually related to violation of PF, which is mitigated as a result of PF deletion. However, it doesn’t seem to apply to (2b) since the ill-formedness of (2b) as an answer to the question is semantic or discourse-related, which is not repaired by ellipsis. Note that (2b) in isolation is not ill-formed if caseless subject is interpreted as (d-linked) topic (cf. Hong 1994, Ahn & Cho 2009). (D-linked) topic, however, cannot be a felicitous answer to *wh*-question, hence

Then, how to derive these two types of fragments in Korean is an interesting puzzle to solve.

The previous analyses of these two types of fragments can be divided into two groups: uniform analyses and hybrid analyses. The former assumes that two types of fragments are derived/interpreted in a uniform way, while the latter assumes that case-marked fragments are derived/interpreted in a way different from caseless fragments.

Further, the uniform analyses are classified into two classes: direct interpretation approaches (Barton 1990, 1991, 1998, Lappin 1996, Ginzburg & Sag 2000, Jackendoff 2002, Culicover & Jackendoff 2005, Barton & Progovac 2005, Stainton 1995, 1997, 1998, 2005, 2006 and others) and ellipsis approaches (Hankamer 1971, Morgan 1973, Sag 1976, Tancredi 1992, Merchant 2004, Ludlow 2005 and others).

The direct interpretation approaches basically assume that fragments are non-sentential XPs. On this view, the unexpressed parts of the fragments' interpretation are supplied not through syntactic structure but via correspondence with the meaning of the antecedent sentence.

The (uniform) ellipsis approaches, in contrast, assume that two types of fragments have the same sentential sources and are derived through deletion process that leaves the fragment. Under a uniform ellipsis approach, Ahn & Cho (2006), for example, assumes (1b-c) have the structure like (3a-b), respectively.

- (3) a. [_{DP} *Yengswu-ka*]_i [_{t_i} ~~*chayk-ul*~~ ~~*sa-ss-e*~~] Case-marked fragment
 b. [_{NP} *Yengswu*]_i [[_{DP} ~~*t_i-ka*~~] ~~*chayk-ul*~~ ~~*sa-ss-e*~~] Caseless fragment

In (3a), DP *Yengswu-ka* undergoes movement to a sentence-initial position and the rest of the structure undergoes ellipsis. In (3b), NP *Yengswu* undergoes movement to

(2b) is ruled out as an inappropriate answer to (1a). Thus, (2b) cannot be an underlying structure for (1c). See further discussion in Ahn (2012:41-42, fn. 20).

The reviewer also points out the possibility that (1c) is derived from the full sentential counterpart like (i).

(i) **chayk-ul* *Yengswu* *sa-ss-e*.
 book-Acc Y. buy-Pst-Dec
 'Intended: 'Yengswu bought a book.'

(i) in isolation is not only ill-formed, but (i) cannot be a felicitous answer to *wh*-question (1a). Hence, the caseless fragment like (1c) may not have a sentential connection like (i), either.

a sentence-initial position and the rest of the structure including the stranded case-marker undergoes ellipsis.² Park (2015) can be classified into uniform ellipsis approach in some respect. Park (2015:827) claims that contra the standard assumption that case-marked and caseless fragments are derived in different ways, even caseless fragments can also be derived in the same way as case-marked ones i.e. via movement + (clausal) ellipsis along the similar lines as Ahn & Cho (2006).³

Recently, An (2016) suggests that these two types of fragments are derived from the same sentential source and that range of the deletion process is different, as shown in (4).

- (4) a. Yengswu-ka_i [~~t_i chayk-ul sa-ss-e~~] Case-marked fragment
 b. Yengswu-ka_i [~~t_i chayk-ul sa-ss-e~~] Caseless fragment

An (2016) advances that PF deletion extends to an ellipsis remnant, deleting parts of it, such as a case marker, a postposition, even head noun, up to recoverability and under adjacency to a string elements that are deleted in PF. Note that the parasitic deletion, which An (2016) terms “extra deletion” occurs in (4b). In the case of extra deletion, elements that are elided are not necessarily syntactic constituents. The requirement of the PF deletion is that the elided elements should form an unbroken, continuous string. As a result, case marker may undergo deletion and caseless fragment occurs.⁴ This ellipsis analysis of fragments may also belong to uniform

2 Ahn & Cho’s analysis advanced in (3) is based on three assumptions. First, argument nominals are DPs (Abney 1987). Second, case markers belong to the category of D (Ahn 1988). Third, although case marker-stranding in (3b) results in an ill-formed structure due to the Stray Affix Filter, the deviance is saved by PF-deletion (cf. Kim 2005, Merchant 2001). However, we think the derivation involving extraction of the NP leaving its case marker in (3b) violates unrepairable syntactic constraints. We return to this matter shortly.

3 Park (2015) can also be regarded as a hybrid analysis in that caseless fragments can be derived without ellipsis. However, Park (2015) doesn’t develop a detailed analysis as to where ellipsis option is used and where non-ellipsis option is used. See Ahn & Cho (2017b) for related discussion.

4 An (2016) generally assumes possibility of non-constituent deletion to handle many interesting phenomena that are somewhat beyond the scope of this paper. However, it is not clear what would be proper requirements for “recoverability” in addition to string-adjacency under An’s PF-deletion analysis. If An assumes something like “semantic” or “syntactic” identity given in Merchant (2001), Chung (2005), and many others, “constituency” seems to be a prerequisite for deletion. Otherwise, it is not clear how recoverability condition can be met under An’s proposal for PF-deletion. Our analysis in this paper departs essentially from An’s (2016) in that we assume a standard constituent deletion under syntactic or semantic identity put forward in Merchant (2001)

analyses of fragments, and we will observe several problems on this proposal in the next sections.

Hybrid analyses have also been made in literature (Morgan 1989, Fortin 2007, Choi and Yoon 2009, Ahn & Cho 2011, 2012, Ahn 2012). On this view, some fragments are derived/interpreted directly, but the others by syntactic ellipsis. Morgan (1989) argues that most of the fragments are derived from complete sentence representations, but he acknowledges a very restricted set of base-generated fragments, just those that can be interpreted pragmatically without recourse to any of linguistic context. Morgan (1989) argues that fragments having no sentential connection are base-generated fragments and that they are interpreted pragmatically. He also notes that when fragments are not answers to questions, as shown in (5), only caseless forms of nouns are acceptable in Korean.⁵

- (5) a. chaphyo han cang
 ticket one Cl
 b. *chaphyo han cang-i
 ticket one Cl-Nom
 c. *chaphyo han cang-ul
 ticket one Cl-Acc
 ‘One ticket!’ (to order a ticket)’ (Morgan 1989:237)

Choi & Yoon (2009) suggests that case-marked fragments require articulated constituents at LF/PF while caseless ones don’t. They suggest that when a caseless fragment has a salient linguistic antecedent, its propositional meaning is resolved by serving as an argument of abstracted element of the source clause.

and many others.

5 More examples are given in Morgan (1985:237).

- (i) a. Nay cha! b.*Nay cha-ka c. *Nay cha-lul
 My car My car-Nom My car-Acc
 ‘My car! (on finding my stolen car)’
 (ii) a. pul! pul! b. *pul-i! *pul-i! c. *pul-ul! *pul-ul!
 fire fire fire-Nom fire-Nom fire-Acc fire-Acc
 ‘Fire! Fire!’

In (i-ii), the fragments require no linguistic context. In this case, fragments’ interpretation is independent of linguistic context, which appears without a case marker.

Ahn & Cho (2011, 2012) and Ahn (2012) claim that case-marked fragments have elided syntactic structures, while caseless fragments are base-generated non-sentential XPs immediately dominated by CPs not involving any elided structures; namely, [_{CP} NP].⁶ They further suggest that caseless fragments are only pragmatically licensed unlike case-marked fragments that are subject to customary conditions on syntactic ellipsis.

In this paper, we attempt to show that based on parallel behaviors shown in the two types of fragments, case-marked and caseless fragments both involve clausal ellipsis. We further suggest that based on non-parallel behaviors between the two types, they are derived from different sorts of sentential structures.⁷ This paper is organized as follows. In section 2, we propose that the two types of fragments are all derived from elliptical structures. However, unlike case-marked fragments, we suggest that caseless fragments are derived from reduced copula sentences, an instance of “limited ellipses” (cf. Merchant 2004). In section 3, we observe some of parallel behaviors (Albert’s generalization) and non-parallel behaviors (Chung’s generalization) of case-marked and caseless fragments. We, then, derive (non)-parallel behaviors of two types of fragments in Korean. Section 4 discusses adnominal modifier fragments. We suggest that numerous peculiar behaviors of adnominal fragments such as apparent Left Branch Condition violations can be properly accommodated under our analysis. Section 5 critically reconsiders Park (2015) and An (2016). Section 6 concludes.

6 They indicate that caseless fragments have (conflicting) dual properties; they display both clausal and non-clausal characteristics. They account for the clausal properties of caseless fragments based on immediately dominating CP projection, while they suggest that the non-clausal XP properties are due to the non-elliptical nature within CP. This line of reasoning runs afoul of the standard conception of CP that directly selects IP (or TP). Our current analysis (we will see shortly), however, can naturally capture the dual nature of caseless fragments under the standard notion of CP.

7 A reviewer points out the possibility that case-marked and caseless fragments differ not in underlying structure but only in morphological realization of case feature. This is basically the spirit underlying uniform (ellipsis) approaches such as Park (2015) and An (2016, 2017). On the view, many non-parallel behaviors between the two types of fragments are hard to explain. As pointed out by Ahn & Cho (2017b), non-parallel behaviors of the two fragments related to distribution of adverbials, idiom interpretation, and polarity & tense mismatching are due to their distinct sentential sources, not to presence or absence of morphological realization *per se*.

2. Our Proposal: Two Different Sentential Sources

We suggest that case-marked and caseless fragments both have sentential connection. Regarding case-marked fragments, following Park (2005b) and Ahn & Cho (2005), we assume that case-marked fragments like (6b) undergo Merchant's (2004) full clausal ellipsis. (6b), thus, has the following derivational step.

- (6) a. Chelswu-ka nwukwu-lul manna-ss-ni?
 C.-Nom who-Acc meet-Pst-Q
 'Who did Chelswu meet?'
 b. Yenghi-lul.
 Y.-Acc
 'Chelswu met Yenghi.'
- (7) [CP Yenghi-lul_i [TP Chelswu-ka t_i manna-ss-e]]

In (7), the pronounced fragment *Yenghi-lul* 'Y-Acc' moves to Spec of C and TP undergoes deletion.⁸

We further suggest that caseless fragments undergo Merchant style 'limited ellipsis'. According to Merchant (2004), when used without an explicit linguistic antecedent such as discourse initial contexts, fragments are derived from copula clauses, as shown in (8).

- (8) a. [Abbey and Ben are at a party. Abbey sees an unfamiliar man with Beth,
 a mutual friend of theirs, and turns to Ben with a puzzled look on her
 face. Ben says] Some guy she met at the park. (Merchant 2004:716)
 b. [_{FP} some guy she met at the park_i [_{TP} he's t_i]].

As shown in (8), the fragment in (8a) has the structure like (8b).⁹

8 Yoon (2012) reports that unlike nominative fragments, accusative fragments like (6b) in the text are unacceptable in Korean. Although accusative fragments are somewhat less natural than nominative fragments, they are not completely ill-formed to us. However, the non-naturalness in accusative case-marked fragments seem to beg further investigations.

9 Craenenbroeck (2012) indicates that we can use the property of tag questions as a window into the internal syntactic structure of clausal ellipsis sites. The "copula-based" tag question in (i) may support Merchant's limited ellipsis analysis of fragments in discourse-initial contexts.

Following Merchant's (2004) core insights of limited ellipsis for discourse-initial fragments in English, we suggest that caseless fragments in (9-10) are derived from copula clauses.

- (9) a. Chelswu-ka nwukwu-lul manna-ss-ni?
 C.-Nom who-Acc meet-Pst-Q
 'Who did Chelswu meet?'
 b. Yenghi.
 Y.
 'Chelswu met Yenghi.'
- (10) a. Chelswu-ka haksayng-ul myech myeng-ul manna-ss-ni?
 C.-Nom student-Acc how many Cl-Acc meet-Pst-Q
 'How many students did Chelswu meet?'
 b. motwu.
 all
 'Chelswu met all the students.'

In particular, we assume that there are two types of subjects involved in reduced copula constructions; namely, demonstratives (*this/that* or a pronoun in a demonstrative use in English, and *kuken/kukey* 'it' in Korean) or expletives (*there/it* in English and null expletive symbolized as "pro" in Korean). We suggest that if the fragments are "referential," the subjects in the copula TP can be "specificational" demonstratives that are related to (pseudo)clefts semantically (cf. Park 2014, Yoon 2014), while if the fragments are "non-referential" (i.e., quantificational (including NPIs) or predicational), the subject of the copula construction should be the "null" expletive in Korean. These two subjects are demonstrated in the following copula constructions that underlie caseless fragments such as *Yenghi* in (9b) and *motwu* 'all' in (10b).

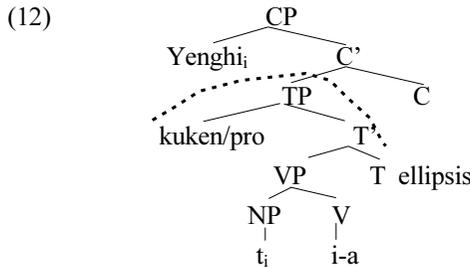
- (11) a. Kuken Yenghi-i-a. (kuken = Chelswu-ka manna-n kes-un)
 It Y.-Cop-Dec C.-Nom met-RC N-Top

(i) [While shaking the hand of a business associate one is meeting in person for the first time]
 How do you do? John Smith, is it?

‘It’s Yenghi. (=It’s Yenghi that Chelswu met.)’
 (“copula *i* + force marker *a*” is pronounced as *ya*)

- b. pro motwu-i-a.
 all-Cop-Dec
 ‘There’s all.’

We suggest that (9b) has the structure like (12).



As shown in (12), to get the caseless fragment out of the copula structure, it is assumed that movement of the (caseless bare) NP is followed by TP ellipsis.¹⁰ The derivational representation given in (12) meets constituency deletion. Extracting NP *Yenghi* out of VP headed by copula *i* is completely licit in (12). Unlike extraction of a non-phase

¹⁰ Yoon (2014) suggests that caseless (i.e., bare) fragment answers in Korean are derived from elliptical “pseudo-cleft” sentences involving elliptical topic phrase and null copula, as shown in (i-b):

- (i) a. nwu-ka hakkyo-eyse chayk-ul ilk-ess-ni?
 who-Nom school-at book-Acc read-Pst-Q
 ‘Who read a book at school?’
 b. [hakkyo-eyse chayk-ul ilk-en kes-un] Yenghi-[∅]_{ya}
 school-at book-Acc read-Adn kes-Top Y.-Cop
 ‘The person who read a book at school is Yenghi.’

Although Yoon’s pseudo-cleft analysis and our reduced copula analysis share numerous non-trivial consequences concerning the distribution of caseless fragments and connectivity effects, there are many theoretical and empirical issues that can be resolved only under the particular “move-and-delete” copula approach like ours. Theoretically, we assume that deleting the copula+INFL (namely, *-ya*) is not licit since the complex does not form a constituent (cf. Chung 2007). Empirically, caseless fragments do not pattern with pseudo-clefts in many ways; for example, negative polarity items (NPIs) completely resist pseudo-clefting, while some NPIs can occur in the reduced copula constructions. Thus, we believe that although Yoon (2014) and ours can be broadly categorized as hybrid ellipsis approaches, the precise range of theoretical predictions is substantially distinct. See Ahn & Cho (2017b) for extensive discussion on this matter.

NP stranding a case marker in (13), which is assumed in Ahn & Cho (2006) and Park (2015), extracting a phase NP *Yenghi* out of VP headed by copula *i* is completely licit in (12) (i.e., we assume a phase, but not part of a phase may undergo movement).¹¹

(13) [_{NP} *Yenghi*] [_{Chelswui=ka} [_{NP} *t_i*]=*lu*]_—*sa-ss-e*

Cranenbroeck (2012) suggests that one way of getting a fairly direct way is by looking at the case morphology of elements that have extracted out of it. Regarding case morphology, the following parallelism shown in caseless fragments in discourse initial contexts (14) and copula sentences (15) supports our limited ellipsis of caseless fragments.¹²

11 It is not clear whether the constraint which is violated in (13) can be repaired by ellipsis. Ahn & Cho (2015b) suggests that a phase can undergo movement, but that part of a phase cannot. With this line of reasoning, movement stranding a case marker in (13) reminds us of non-phasal unit movement, which, we suggest, violates the derivational constraint that cannot be repaired by ellipsis.

Ahn & Cho (2015b) shows that (ia-b) are ill-formed because non-phasal units such as NP and TP in (i) cannot undergo movement (cf. Johnson 2001:443).

- (i) a. *It's [_{NP} *story*]_i that Joe Bell will read [_{DP} *Holly's t_i*]
 b. *It's [_{TP} *we go to the meeting*]_i that Sally will tell us [_{CP} *when t_i*]

Likewise, we claim that case-stranding movement in (13) is an instance of illegitimate non-phasal NP movements since unlike (12) the (non-phasal) bare NP is extracted out of phasal case-marked NP. Note that we assume a notion of phase as relative (not absolute) concept on a par with Bošković (2014, to appear). Unlike Chomsky's (2000, 2001) approach assuming that phasehood is in a sense rigid (i.e., the phasal status of a category does not depend on its syntactic context), Bošković (2014, to appear) suggests that phasehood should also be defined contextually, that is, that the phasal status of X can be affected by the syntactic context in which X is found.

12 There are also some antecedents of copula analysis of caseless fragments in other languages. Fukaya (2007) shows that Japanese has two sluicing-like constructions, one in which the sluiced *wh*-phrase is case-marked (ia) and one in which this case ending is dropped (ib).

- (i) a. John-wa dareko-a suisensita ga, boku-wa **dare-o** ka siranai.
 John-Top someone-Acc recommended but I-Top who-Acc Q know.not
 'John recommended someone, but I don't know who.'
 b. John-wa dareko-a suisensita ga, boku-wa **dare** ka siranai.
 John-Top someone-Acc recommended but I-Top who Q know.not
 'John recommended someone, but I don't know who.'

Fukaya (2007) suggests that the caseless version is derived from a cleft source and that the case-marked version isn't.

Barton & Progovac (2005:77-79) also shows that fragments in English also pattern with nominals in copula sentences, as shown in (ii-iii).

- (ii) a. Who can eat another piece of cake?

- (14) a. *chaphyo han cang.*
 ticket one Cl
 b. **chaphyo han cang-i.*
 ticket one Cl-Nom
 c. **chaphyo han cang-ul.*
 ticket one Cl-Acc
 ‘One ticket!’ (to order a ticket)’ (Morgan 1989:237)
- (15) a. *Ikes-i chaphyo han cang-i-a.*
 this-Nom ticket one Cl - Cop-Dec
 ‘This is one ticket.’
 b. **Ikes-i chaphyo han cang-i/ul-i-a.*
 this-Nom ticket one Cl - Nom/Acc-Cop-Dec
 ‘This is one ticket.’

Given that caseless fragments are derived from copula constructions, the parallel behavior shown in (14) and (15) is easily explained.

Given that caseless fragments are derived from copula constructions, a non-trivial question arises about non-isomorphism between the ellipsis site and its antecedent. Following some predecessors of our reduced copula analysis for caseless fragments (Hoji 1990, Merchant 2004, Park 2005, Fukaya 2007, Craenenbroeck 2012, Park 2014, Yoon 2014, *inter alia*),¹³ ellipsis identity is syntactic/structural, but possible ellipsis antecedents are not only sentences that are actually part of the linguistic context, but also sentences that are accommodated from non-F-marked overt material in the discourse or from elements that are freely available in any discourse. Along the similar vein, we suggest

-
- b. *?*I/?*We/*He/?*She*
 c. *Me/?Us/Him/Her.*
 (iii) a. This is me/him/us.
 b. It’s me/him/us.

13 Although Sohn (2000) puts forward a copula analysis of sluicing-like constructions in Korean, his analysis can be naturally extended to caseless fragments, too. The predecessors of our analysis of caseless fragments are two classes: copula analysis (Sohn 2000, Merchant 2004, Park 2005, Craenenbroeck 2012) and (pseudo)cleft analysis (Fukaya 2007, Park 2014, Yoon 2014). Among many others, our copula analysis gains insights from Sohn (2000) and adopts technical details from Merchant (2004) and Craenenbroeck (2012). Ha (2017) also independently advanced a similar analysis for the dual nature of sluicing-like constructions in Korean, which shares the core spirits of ours.

that in the copula source of caseless fragment, ellipsis identity is satisfied by accommodated antecedents that are freely available in any discourse.

The analysis advanced here further accounts for a non-trivial fact regarding island effects, as shown in (16), which is a bit modified from the example Wee (2014:275) points out. According to the contrast between (16b) and (16b'), the two types of fragments seem to behave differently.^{14 15}

14 When we use *etten* 'which' instead of *mwusun* 'what', case-marked fragment can also be well-formed, as shown in (i).

- (i) a. Kyengchal-i etten cha-lul hwumchi-n totwuk-ul cap-ass-ni?
 police-Nom which car-Acc steal-RC thief-Acc catch-Pst-Q
 'For which car, did the police catch the thief who stole it?'
 b. Sonata-lul.
 S.-Acc.
 b'. Sonata.

Since Pesetsky (1987), it has been recognized that D-linked *wh*-phrase are exempt from otherwise strict conditions, which seems to be related to acceptance of case-marked fragment in (ib).

15 With respect to island effects, subject-object asymmetry is attested, as shown in (i).

- (i) a. John-un nwu-ka cakkokha-n nolay-lul pwul-ess-ni?
 J. -Top who-Nom compose-RC song-Acc sing-Pst-Q
 '*Who did John sing a song that wrote?'
 b. Max-ka.
 M.-Nom (Park 2005a:98)
 (ii) a. Cheli-nun nwu-ka sacwu-n mokkal-lul peli-ess-ni?
 C.-Top who-Nom bought-RC necklace-Acc throw.away-Pst-Q
 '*Who did Cheli throw away the necklace that bought for him?'
 b. Emma-ka.
 mother-Nom (Ko 2014:299)

As shown in (i-ii), case-marked fragments in subject positions seem to be well-formed in spite of island violation. Han and Kim (2004) notes that a similar fact is observed in double relative clauses in Korean. They suggest that the "double relative clause" in Korean is derived from a double nominative construction by relativizing the first nominative NP from an IP-adjoined position. As a result, there is no island violation in the apparent "double relative clause" formation. We may think that possibility in a similar way for subject fragments: i.e., there is no island violation in case-marked fragments in subject positions.

A reviewer asks if when we use *mwues* 'what' instead of *mwusun cha* 'what car', the case-marked fragment can be well-formed, as shown (iii).

- (iii) a. Kyengchal-i mwues-ul hwumchi-n totwuk-ul cap-ass-ni?
 police-Nom what-Acc steal-RC thief-Acc catch-Pst-Q
 'For what, did the police catch the thief who stole it?'
 b. ??Sonata-lul.
 S.-Acc.
 b'. Sonata.

- (16) a. Kyengchal-i mwusun cha-lul hwumchi-n totwuk-ul cap-ass-ni?
 police-Nom what car-Acc steal-RC thief-Acc catch-Pst-Q
 ‘For what car, did the police catch the thief who stole it?’
 b. *Sonata-lul.
 S.-Acc.
 b’. Sonata.

Wee (2014:275) points out that the contrast between two types of fragments illustrated in (16) hinges on the premise that only case-marked fragment involves an illegal movement from the NP.¹⁶

Our analysis of caseless fragments well captures the grammatical contrast between (16b) and (16b’). Here too, the contrast may be analyzed as absence or presence of movement of fragments across islands. Under the analysis advanced here, (16b’) does not involve any movement across islands.¹⁷ (16b’) is derived from a copula construction, as shown in (17).

It is not clear to us whether (iii b) sounds far better than (16b). We leave the issue of acceptability judgment for future research.

16 Note that in non-island contexts like (i), both case-marked and caseless fragments are well-formed.

- (i) a. Ne-nun kyengchal-i mwusun cha-lul sa-ss-ta-ko sayngkakhani?
 you-Top police-Nom what car-Acc buy-Pst-Dec-C think-Q
 ‘What car do you think the police bought?’
 b. Sonata-lul.
 S.-Acc.
 b’. Sonata.

17 Fukuya & Hoji’s (1999) analysis of two types of sluicing in Japanese seems to pattern with our analysis of two types of fragments. They suggest that some kinds of clausal structures with the copula as (part of) the head predicate is involved in both stripping and sluicing and the presence or absence of locality effects can be construed as evidence that some kind of movement operation is involved in the case-marked construction, but not in the caseless construction, as shown in (i). The case-marked and the non-case-marked constructions have the structures in (i) at Spell-Out.

- (i) a. Case-marked construction: [_{IP} [_{VP} [_{IP} NP-CM [_{IP} ec]] (be)]]
 b. Non-case-marked construction; [_{IP} [_{VP} [_{NP} ec] [_V’ NP-∅ [_V (be)]]]]]]

They suggest that the empty IP is necessarily an instance of surface anaphora and the empty NP an instance of deep anaphora. Interestingly, both of the constructions are derived from copula sentences, which can be possible given that unlike Korean, case-markers in Japanese can occur in copula sentences.

(17) [CP [NP Sonata]_i [C' [TP ~~kuken~~ [_F [_{VP} ~~t_i~~ i-a] T]] C]]

Our copula analysis is evidenced by the parallel grammatical judgement between (16b') and (18) as a reply to the question (16a); i.e., (18) is as acceptable as (16b') as a reply to (16a).¹⁸

(18) (Kuken) Sonata-i-a.
 it S.-Cop-Dec
 'It's Sonata.'

Our copula analysis of caseless fragments also accounts for peculiar properties of caseless fragments concerning quantifier scope and anaphoric binding. Ahn & Cho (2012) indicates that caseless fragments do not pattern with their full sentential correlates concerning quantifier scope and anaphoric binding:

(19) Q: Yenghi-ka ta an manna-ss-ni? (ambiguous: $\forall >$ or $< \text{Neg}$)
 Y.-Nom all not meet-Pst-Q
 'Didn't Mary meet everyone?'
 A: Ung, ta. (unambiguous: $\forall > \text{Neg}$ only)
 Yes, all
 'No, (she didn't meet) everyone.'
 A': Ung, Yenghi-ka ta an manna-ss-e.
 Yes, Y.-Nom all neg meet-Pst-Dec
 'No, she didn't meet everyone.' (ambiguous: $\forall >$ or $< \text{Neg}$)

(20) Q: Chelswu-ka_i nwukwu-lul piphanhay-ss-ni?
 C.-Nom who-Acc criticize-Pst-Q
 'Whom did Chelswu criticize?'
 A: caki_i,
 himself
 'Chelswu criticized himself.'

¹⁸ Park (2005a) suggests that the island-insensitive non-case-marked matrix sluicing is not derived in the same way as case-marked matrix sluicing. The structure advanced by Park (2005a) is non-trivially different from the one advanced here because it does not assume movement of remnant fragment and TP ellipsis. Furthermore, Park didn't extend the analysis of matrix sluicing to caseless fragments in general.

- A': *Chelswu-ka_i caki_i piphanhay-ss-ta.
 C.-Nom himself criticize-Pst-Dec
 'Intended reading: Chelswu criticized himself.'

The caseless fragment (19A) yields wide scope reading of the universal quantifier while the full sentence (19A') is ambiguous in scope. Further, the caseless reflexive fragment (20A) is possible while its (potential) sentential counterpart is not. Thus, Ahn & Cho (2012) concludes that the above contrasts support the claim that caseless fragments are directly base-generated as nonsentential XPs. These contrasts, however, can be easily accommodated under the current proposal that assumes limited ellipsis analysis of caseless fragments, since the proposed sentential sources for (19A) and (20A), as shown in (21), pattern all alike (N.B.: *caki* 'himself' in (20A) and (21b) is discourse-bound).

- (21) a. Ung, ta-i-a. (unambiguous: $\forall > \text{Neg}$ only)
 Yes, all-Cop-Dec
 'Lit. No, it's all.'
 b. caki-i-a.
 Himself-Cop-Dec
 'Lit. It's himself.'

In the next section we observe further evidence for limited ellipsis analysis of case fragments in Korean.

3. Albert's Generalization & Chung's Generalization

We show that if these two types of fragments are sensitive to syntactic conditions, direct interpretation analyses of either case-marked or caseless fragments will not be on the right track. The first evidence is concerned about Albert's generalization. As noted by Chris Albert, reported by Chung et al. (1995), island violations are not repaired in "sprouting" cases, where the interrogative phrase that is remnant of the ellipsis site has no overt correlate within the antecedent clause, as shown in (22a). By contrast, island violations are repaired in "merger" cases where the interrogative phrase that is the remnant of ellipsis has an overt correlate in the antecedent clause, as shown in (22b).

- (22) a. *Sandy was trying to work out which students would speak, but she refused to say who to.
 b. Sandy was trying to work out which students would be able to solve a certain problem, but she wouldn't tell us which one.
 (Chung et al. 2011:1)

Albert's generalization mentioned above is also found with two types of fragments in Korean shown in (23-24).¹⁹

- (23) a. Cheli-nun [___ sacwu-n] mukkeli-lul peli-ess-ni?
 C.-Top bought-RC necklace-Acc throw.away-Pst-Q
 'Did Cheli throw away the necklace that the person bought for him?'
 b. *Ung, emma-ka.
 Yes, mom-Nom
 'Yes, (his) mom.'
 b' *Ung, emma.
 Yes, Mom
 'Yes, (his) mom.' (Ahn & Cho 2015a:432)
- (24) a. Cheli-nun [emma-ka sacwu-n] mukkeli-lul
 C.-Top mother-Nom bought-RC necklace-Acc

¹⁹ Lee (2016:120) and Kim (2017:11) indicate that the deviance of B's response follows from the incongruence between the form of question and answer; namely, (23a) is a polar question while B's response specifies an answer to the *wh*-question. In other words, they argue that a fragment answer to an implicit correlate is not possible to begin with. However, we believe (23a) and (23b) can be an appropriate question-answer pair since *ung* 'yes' in (23b) can fulfill a proper answer to the polar question (23a). Further, we observe a similar pattern for a fragment answer to a non-implicit correlate below:

- (i) a. Cheli-nun [nwukwunka-ka sacwu-n] mukkeli-lul peli-ess-ni?
 C.-Top someone-Nom bought-RC necklace-Acc throw.away-Pst-Q
 'Did Cheli throw away the necklace that someone bought for him?'
 b. *Ung, emma-ka.
 Yes, mom-Nom
 'Yes, (his) mom.'
 b' *Ung, emma.
 Yes, Mom
 'Yes, (his) mom.'

Thus, it seems that the deviance in (23) has nothing to do with the form of question-answer pair *per se*.

- peli-ess-ni?
 throw.away-Pst-Q
 ‘Did Cheli throw away the necklace that his mom bought for him?’
 b. Ung, emma-ka.
 Yes, Mom-Nom
 ‘Yes, (his) mom.’
 b’ Ung, emma.
 Yes, Mom
 ‘Yes, (his) mom.’ (Ahn & Cho 2015a:430)

As shown in (24), where the correlate of the fragment overtly occurs, island violation is not observed. As shown in (23), by contrast, where question does not have a correlate of its fragment answer, the fragment answers are all ill-formed, which may be related to island violation phenomena. Direct interpretation analyses, assuming that a fragment is a non-sentential XP and is interpreted directly by pragmatics, cannot account for the fact that both the fragments are sensitive to Albert’s generalization which is a syntactic phenomenon.

However, although a detailed analysis is not given to the ill-formedness of (23b’) and well-formedness of (24b’), our analysis advanced here predicts that the sentential counterpart of (23b’) and (24b’) show grammatical judgement parallel to (23b’) and (24b’), as shown in (25-26).²⁰

- (25) a. Cheli-nun [___ sacwu-n] mukkeli-lul peli-ess-ni?
 C.-Top bought-RC necklace-Acc throw.away-Pst-Q
 ‘Did Cheli throw away the necklace that the person bought for him?’
 b’ *Ung, emma-i-a.
 Yes, mom-Cop-Dec
 ‘Yes, (his) mom.’

 (26) a. Cheli-nun [emma-ka sacwu-n] mukkeli-lul
 C.-Top mother-Nom bought-RC necklace-Acc

20 Hyon-Sook Choe (by p.c.) points out that (25b’) is worse than (24b’). She indicates that copula constructions as a reply to the questions are generally worse than bare caseless fragment answers. At this stage it is not clear how her intuition is empirically and theoretically justified. We leave this issue (if real) for future research.

pe-li-ess-ni?

throw.away-Pst-Q

‘Did Cheli throw away the necklace that his mom bought for him?’

b. Ung, emma-i-a.

Yes, Mom-Cop-Dec

‘Yes, (his) mom.’

The second evidence is concerned with Chung’s generalization. Chung (2005) shows that even in preposition stranding languages, preposition cannot be stranded in the elided TP in sprouting cases - when the interrogative phrase that is the remnant of ellipsis has no overt correlate in the antecedent clause as shown in (28). Compare (27) with (28) (Chung et al. 2011:9).

- (27) a. They are jealous but it’s unclear of who/who of.
 b. Last night he was very afraid, but he couldn’t tell us of what/what of.
 c. Mary was flirting, but they couldn’t say with who/who with.
- (28) a. *They are jealous but it’s unclear who.
 b. *Last night he was very afraid, but he couldn’t tell us what.
 c. *Mary was flirting, but they couldn’t say who.

Fragments in Korean also seem to follow Chung’s generalization. When an overt correlate of a fragment answer is present in its question, postposition drop is possible, as shown in (29).

- (29) a. Yenghi-ka eti-se nolay-lul pwul-ess-ni?
 Y.-Nom where-Loc song-Acc sing-Pst-Q
 ‘Where did Yenghi sing a song?’
 b. kongwon-eyse.
 park-at
 c. kongwon.
 park
 ‘(she sang a song) at a park.’

When a correlate of a fragment answer is not present in its question, postposition drop makes the sentence ungrammatical, as shown in (30).

- (30) a. Yenghi-ka nolay-lul pwul-ess-ni?
 Y.-Nom song-Acc sing-Pst-Q
 b. Ung, kongwon-eyse.
 Yes, park-at
 c. *Ung, kongwon.
 Yes, park
 ‘Yes, (she sang a song at) a park.’

Along with Chung’s generalization shown in the contrast between (29) and (30), the examples in (29) themselves raise a non-trivial issue related to P(reposition)-stranding. Merchant (2004:685-687) argues that fragments and their correlates show parallelism with respect to P-stranding. In languages like English and the Scandinavian languages, which allow P-stranding *wh*-movement in questions, bare DP answers to such questions are permissible. By contrast, in non-prepositional languages, such DP answers are impossible. This supports Move-and-delete analysis of fragments.

Interestingly, the fragment in (29c) doesn’t seem to confirm the parallelism. The Merchant style full-clausal counterpart of (29c) is shown in (30’).

- (30’) *kongwon_i Yenghi-ka t_i-eyse nolay-lul pwul-ess-e.

It is expected that P-stranding in fragments like (29c) is not possible on a par with that in their full clausal counterparts like (30’), contrary to fact. Thus, we consider two ways to solve the P-stranding puzzle in Korean fragments. One way is to reconsider P-stranding connectivity put forward in Merchant (2004) as evidence for Move-and-Delete analysis. Ahn & Cho (2006) suggests that P-stranding in Korean is a PF constraint. On this view, if the structure containing the violation is elided, the deviance is eliminated.

The other way to solve P-stranding puzzle in Korean is to assume that Korean has another kind of fragments, as noted by Ahn & Cho (2011) and Ahn (2012). In other words, apparent P-stranding fragments are not derived through Merchant’s

(2004) style full clausal ellipsis but through limited ellipsis. Vicente (2008) shows that Spanish appears to be an exception for P-stranding.

- (31) a. *¿Qué chica rubia ha hablado Juan con?
 what girl blonde has talked Juan with
 ‘Intended: ‘What blonde girl did Juan talk to?’
- b. Juan ha hablado con una chica rubia pero no sé cuál
 Juan has talked with a girl blonde but not know which
 ‘Juan talked to a blonde girl, but I don’t know which.’

As shown in (31a), P-stranding is not allowed in regular *wh*-questions, but as shown in (31b), P-stranding is allowed in sluicing. Vicente (2008) suggests that P-stranding violations under sluicing in Spanish do not derive from a regular *wh*-question, but from an underlying cleft.

- (32) Juan ha hablado con una chica rubia pero no
 Juan has talked with a girl blonde but not
 sé cuál ~~es~~ ~~pro~~
 know which is it
 ‘Juan talked to a blonde girl, but I don’t know which.’

Our analysis also accounts for the facts related to Chung’s generalization. When an overt correlate of a fragment answer is present in its question, postposition drop is possible, as shown in (29), repeated here as (33).

- (33) a. Yenghi-ka eti-se nolay-lul pwul-ess-ni?
 Y.-Nom where-Loc song-Acc sing-Pst-Q
 ‘Where did Yenghi sing a song?’
- b. kongwon-eyse.
 park-at
 ‘Lit. at a park.’
- c. kongwon.
 park
 ‘Lit. a park.’

Case-marked fragment (33b) and caseless fragment (33c) show grammatical judgement parallel to full clause counterpart (34b) and copula sentence (34c), respectively.²¹

- (34) a. Yenghi-ka eti-se nolay-lul pwul-ess-ni?
 Y.-Nom where-Loc song-Acc sing-Pst-Q
 ‘Where did Yenghi sing a song?’
 b. Yenghi-ka kongwon-eyse nolay-lul pwul-ess-e.
 Y.-Nom park-at song-Acc sing-Pst-Dec
 ‘she sang a song at a park.’
 c. kongwon-i-a.
 park-Cop-Dec
 ‘It’s a park.’

When an overt correlate of a fragment answer is not present in its question, postposition drop makes the sentence ungrammatical, as shown in (30), repeated here as (35).²²

- (35) a. Yenghi-ka nolay-lul pwul-ess-ni?
 Y.-Nom song-Acc sing-Pst-Q
 ‘Where did Yenghi sing a song?’

21 Park (2014) also proposes that caseless fragments like (33c) are derived from (pseudo-)cleft structures based on Chung’s generalization.

22 As pointed out by a reviewer, postpositions can occur in copula constructions, as shown in (i).

- (i) kongwon-eyse-i-a.
 park-at-Cop-Dec
 ‘It was at the Park.’

Hence, the fragment in (35b) can be derived either through full clause ellipsis or through limited ellipsis. Both of the sentential counterparts are well-formed as a reply to (35a).

- (ii) a. Yenghi-ka nolay-lul pwul-ess-ni?
 Y.-Nom song-Acc sing-Pst-Q
 ‘Where did Yenghi sing a song?’
 b. Ung, Yenghi-ka kongwon-eyse nolay-lul pwul-ess-e.
 Yes, Y.-Nom park-at song-Acc sing-Pst-Dec
 ‘Yes, she sang a song at a park.’
 c. Ung, kongwon-eyse-i-a.
 Yes, park-at-Cop-Dec
 ‘Yes, it was at a park.’

- b. Ung, kongwon-eyse.
Yes, park-at
'Lit. Yes, at a park.'
- c. *Ung, kongwon.
Yes, park
'Lit. Yes, a park.'

Again, (35b) and (35c) show grammatical judgements parallel to their sentential connections (36b) and (36c), respectively.

- (36) a. Yenghi-ka nolay-lul pwul-ess-ni?
Y.-Nom song-Acc sing-Pst-Q
'Where did Yenghi sing a song?'
- b. Ung, Yenghi-ka kongwon-eyse nolay-lul pwul-ess-e.
Yes, Y.-Nom park-at song-Acc sing-Pst-Dec
'Yes, she sang a song at a park.'
- c. *Ung, kongwon-i-a.
Yes, park-Cop-Dec
'Yes, It's a park.'

Our analysis also accounts for the contrast between (37b) and (38b) involving the so-called caseless matrix sluicing (cf. Park 2005a).

- (37) a. Na-nun nwukwunka-eykey nonmwun-ul ponay-ss-e.
I-Top someone-Dat paper-Acc send-Pst-Dec
'I sent someone the paper.'
- b. nwukwu?
who (Park 2015:837)
- (38) a. na-nun nonmwun-ul ponay-ss-e.
I-Top paper-Acc send-Pst-Dec
'I sent someone the paper.'
- b. ?*nwukwu?
who (Park 2015:837)

Matrix sluicings in (37b-38b) also show the grammatical judgements parallel to the copula sentences (39b-40b), respectively.

- (39) a. Na-nun nwukwunka-eykey nonmwun-ul ponay-ss-e.
 I-Top someone-Dat paper-Acc send-Pst-Dec
 ‘I sent someone the paper.’
 b. nwukwu-i-a?
 who-Cop-Q
- (40) a. na-nun nonmwun-ul ponay-ss-e.
 I-Top paper-Acc send-Pst-Dec
 ‘I sent someone the paper.’
 b. ?*nwukwu-i-a?
 who-Cop-Q

We can also account for the contrast between (38b) and (41b), as indicated in Park (2015:837). As expected, the case-marked matrix sluicing in (41b) patterns on par with its full clause counterpart (41c).

- (41) a. Na-nun nonmwun-ul ponay-ss-e.
 I-Top paper-Acc send-Pst-Dec
 ‘I sent someone the paper.’
 b. nwukwu-eykey?
 who-at
 c. nwukwu-eykey ne-nun nonmwun-ul ponay-ss-ni?
 who-at you-Top paper-Acc send-Pst-Q
 ‘To whom did you send a paper?’

Hence, we correctly capture the contrast between caseless vs. case-marked matrix sluicing on par with fragment answers.

The analysis advanced here further accounts for the contrast given in (42), as noted in Park (2005a, fn. 9).

- (42) a. Bill-i nwukwu-lul-wuihayse nolay-lul pwul-ess-ni?
 B.-Nom who-Acc-for song-Acc sing-Pst-Q
 ‘For whom did Bill sing a song?’
 b. Mary-lul-wuihayse.
 M.-Acc-for
 ‘For Mary’
 c. *Mary-lul.
 M.-Acc
 ‘For Mary’
 d. Mary.
 M.
 ‘For Mary’

(42b) and (42c) may have the structures like (43a) and (43b), respectively.

- (43) a. Mary-lul-wuihayse_i [_{TP} Bill-i t_i nolay-ul pwul-ess-ta]
 b. Mary-lul_i [_{TP} Bill-i t_i-wuihayse nolay-ul pwul-ess-ta]
 c. Mary_i [_{TP} Bill-i t_i-lul-wuihayse nolay-ul pwul-ess-ta]

Under the analysis advanced here, (43b) involves illicit movement, which results in ill-formedness of (42c) (recall the discussion in fn. 11 why this illicit movement cannot be ameliorated by ellipsis). If one assumes that (42d) has the structure like (43c), it will involve illicit movement. However, under the analysis advanced here, we suggest that the caseless fragment is derived through limited ellipsis, as shown in (44).

- (44) [_{CP} Mary_i [_{TP} ku-ken t_i-i-a]]

Our limited ellipsis analysis of caseless fragments can further account for the following contrast, as shown in (45), which was first indicated by Choi & Yoon (2009).

- (45) a. Cheli-ka Yenghi-lul mwe-la-ko sayngkakha-ni?
 C.-Nom Y.-Acc what-Dec-C think-Q
 ‘What does Cheli think of Yenghi?’

- b. papo.
fool
- c. *papo-la.
fool-Dec
- d. papo-la-ko.
fool-Dec-C

The contrast between (45b) and (45c) is related to the one in (46a) and (46b) as a reply to the question (45a).²³

23 One reviewer disagrees with us about the judgment of (46). There seems to be speakers' variation about the judgment of (46). Note, however, that compared to (46a), the following (ib) seems to be much more degraded.

- (i) a. Cheli-ka Yenghi-lul mwe-la-ko sayngkakha-ni?
C.-Nom Y.-Acc what-Dec-C think-Q
'What does Cheli think of Yenghi?'
- b. *Kuken papo-i-a. (kuken = Cheli-ka Yenghi-lul sayngkakha-n kes-un)
that fool-Cop-Dec C.-Nom Y.-Acc think-RC N-Top
Intended: 'It is a fool. = It's a fool that Cheli thought Yenghi. or
What Cheli thought Yenghi is a fool.'

Given that (ib) is more degraded than (46a), the reasonable conclusion is that the underlying structure of it cannot be a (pseudo)left construction (recall discussion surrounding (10-11)).

(45b) may not be derived from the copula construction that involves an overt pronoun subject, as shown in (iib).

- (ii) a. Cheli-ka Yenghi-lul mwe-la-ko sayngkakha-ni?
C.-Nom Y.-Acc what-Dec-C think-Q
'What does Cheli think of Yenghi?'
- b. *Kunye-nun papo-i-a.
she-Top fool-Cop-Dec
'She is a fool.'

(iib) is ill-formed as a reply to (iia). The ill-formedness of (ib) and (iib) leads to the conclusion that the underlying structures of predicational fragments cannot have overt subjects but null expletives.

Recall that a similar phenomenon is observed with negative polarity items.

- (iii) a. Chelswu-ka ecey nwukwu-lul manna-ss-ni?
C.-Nom yesterday who-Acc meet-Pst-Q
'Who did Chelswu meet?'
- b. amwuto.
anybody
- c. ?amwuto-i-a.
anybody-Cop-Dec

- (46) a. ?papo-i-a.
 fool-Cop-Dec
 b. *papo-la-i-a.
 fool-Dec-Cop-Dec

We assume that the caseless fragment in (45b) is derived from (46a), and both of them are predicted to be well-formed. Likewise, the ill-formedness of the caseless fragment (45c) parallels that of the copula source (46b). (45d), on the other hand, is derived from (47) via move-and-delete.²⁴

-
- d. *kuken amwuto-i-a.
 It anybody-Cop-Dec
 ‘It was anybody.’

Given that (iiid) is ill-formed, it seems reasonable to assume that the sentential source of (iiib) contains not overt pronoun but null expletive subject (Ahn & Cho 2017b).

To recap, we suggest that there are two “syntactic” formulations of copula constructions that underlie caseless fragments in Korean:

- (iv) a. kuken Y-i-ta. (Y = referential; subject = specificational demonstrative *kuken*)
 b. pro Y-i-ta. (Y = non-referential; subject = null expletive *pro*)

It is immaterial for our purposes whether expletive *pro* exists in Korean or not. However, if the pivot Y is an instance of QPs (including NPIs) or predicational, the subject must be unpronounced in Korean; We assume the unpronounced subject in this context as a null expletive *pro*. By contrast, when the pivot Y is referential, the copula construction patterns with (pseudo)clefts that involve specificational (demonstrative) subjects.

24 As pointed out by a reviewer, the copula source of (45d) is ill-formed, as shown in (i).

- (i) *papo-la-ko-i-a
 fool-Dec-C-Cop-Dec

However, the full clausal source is well-formed, as shown in (47). Hence, (45d) is predicted to be ruled in. As pointed out by a reviewer, one might wonder why (45d) is derived from full clause like case-marked fragment. According to Jeong (1999), COMP *-ko* is an accusative case marker, just as the nominal suffix. More specifically, *-ko* and *-lul* are licensed in the same configurations, that is, in configuration to V.

- (ii) a. *[Sue-ka iki-ess-ta-ko] Joe-uy mitum
 Sue-Nom win-Pst-Dec-C J.-Gen belief
 ‘Joe’s belief that Sue won’ (Jeong 1999:48)
 b. *[Sue-ka iki-ess-ta-ko] motwu-lul nolakey hay-ess-ta.
 S.-Nom win-Pst-Dec-C all-Acc surprise make-Pst-Dec
 ‘That Sue won surprised everybody.’ (Jeong 1999:48)

Jeong indicates that the *-ko* is not licensed either in complement to N nor in subject position, as shown in (ii).

(47) [*pro* papo-la-ko]_i Cheli-ka Yenghi-lul t_i sayngkakha-n-ta.

As (47) is well-formed, (45d) is predicted to be ruled in.

Uniform ellipsis analyses such as An (2016) and Park (2015) seem to hardly account for the above contrasts that we observe. Park (2015, fn 14.) claims that unlike NP+Case, the *la+ko* complex is indeed a morphologically ‘fused’ element, i.e. one unit, so they cannot be separated in the fragment utterance. However, Park (2015) does not provide the detailed analysis of this phenomenon further.

An’s PF-deletion (or Extra Deletion) analysis is subject to similar problems as Park’s; why Comp *-ko* cannot undergo (extra) deletion in (45c). An (2016:16) indicates that Comp *-ko* deletion is independently barred due to a prosodic requirement when a CP is displaced, following An (2007a, b). Thus, it seems that PF-deletion, according to An (2016), applies to unbroken strings that obey extra prosodic regulation that is in some sense “structural.” Our proposal dispenses with extra restriction that An made for the impossible absence of C *-ko* in (45c).

4. Further Implications: Adnominal Modifier Fragments

Adnominal modifiers (here, a genitive fragment) occur as fragment answers, as shown in (48).

- (48) a. Yenghi-ka nwukwu-uy emma-lul manna-ss-tay?
 Y.-Nom who-Gen mother-Acc meet-Pst-Q_{hearsay}
 ‘Whose mother did Yenghi meet?’
 b. Cheli-uy.
 C.-Gen
 ‘Cheli’s’
 b’. Cheli.
 C. (Ko 2014:300)

One might derive genitive case-marked fragments like (48b) from full clausal ellipsis; namely, movement of *Cheli-uy* prior to TP-deletion. This derivation, however, violates Left Branch Condition (LBC),²⁵ which we claim cannot be

²⁵ In line with this reasoning, we suggest that (45d) is derived through full clause ellipsis.

repaired by ellipsis.²⁶ We suggest that adnominal modifier fragments (whether case-marked or not) are uniformly derived from reduced copula constructions.²⁷ Hence, the adnominal modifier fragments in (48b-b') are derived from copula constructions (49a-b), respectively.

- (49) a. Cheli-uy emma-i-a.
 C.-Gen mother-Cop-Dec
 'It's Cheli's mother.'
 b. Cheli-i-a.
 C.-Cop-Dec
 'It's Cheli.'

25 Ross (1967) notices that left branch constituents are frozen, as shown in (i).

- (i) Left Branch Condition
 No NP which is the leftmost constituent of a larger NP can be reordered out of this NP by a transformational rule.

Emonds (1985) proposes his latest version of the LBC, as shown in (ii).

- (ii) Generalized Left Branch Condition (Emonds 1985)
 No syntactic phrase C to the left of the lexical head of an X can be analyzed as a C by a transformation.

In both (i) and (ii), the (linear) syntactic property of being to the left of the head of phrase is the relevant factor that accounts for nonextractability.

26 Without postulating island-repair by PF-deletion, there are two alternative analyses put forward by Ahn (2012) and An (2017). Ahn (2012:67) indicates a possibility that the entire island category *Cheli-uy emma* 'Cheli's mom' undergoes extraction followed by an extra movement of the genitive phrase *Cheli-uy* prior to TP-ellipsis.

- (i) Cheli-uy₂ [_{TP} [_{TP} [_{DP} t₂ emma-lul]_i [_{TP} Yenghi-ka t_i mannasse]]]]

This extra movement, however, seems to violate the Condition on Extraction Domains (Huang 1982); namely, extracting out of adjunct domains is barred. An (2017), on the other hand, proposes an extra deletion after pied-piping movement:

- (ii) [_{TP} [_{DP} Cheli-uy₂ emma-lul]_i [_{TP} Yenghi-ka t_i mannasse]]]

An's (2017) analysis, however, assumes the extra deletion of a non-constituent, which our analysis tries to dispense with.

27 This is in line with An (2014), which suggests that *-uy* is an allomorph of prenominal inflection which has nothing to do with Case. An (2014) claims that it is not correct to refer to *-uy* as a case marker.

Both (49a) and (49b) are appropriate as an answer to the question (48a). Hence, (48b) and (48b') are both appropriate fragment answers to the question in (48a).²⁸ We suggest that (48b') has the derivation like (50).

(50) Cheli_i [(kuken) t_i-i-a].

We further suggest that (48b) has the derivation like (51).

(51) Cheli-uy_i [(kuken) [_{NP} t_i t_j] emma_j-i-a].

Since *Yenghi-uy* 'Yenghi-Gen' occurs to the left of the head *emma* 'mother', its extraction in (51) also raises a non-trivial question as to the violation of LBC. We suggest that extraction of the genitive possessor out of NP obviates LBC violation since the head N incorporates into the copula, which may relax the island status of NP (or DP).²⁹ This reminds us of den Dikken's (2006) phase extension. Given that

28 We note that genitive drop patterns with postposition drop. Further, parallel to a postposition, when an overt correlate of a fragment answer is present in its question, genitive case marker drop is possible, as shown in (48). When a correlate of a fragment answer is not present in its question, genitive case marker drop is impossible, as shown in (i).

- (i) a. Yenghi-ka emma-lul manna-ss-tay?
 Y.-Nom mother-Acc meet-Pst-Q_{hearsay}
 'Did Yenghi meet someone's mother?'
 b. Ung, Cheli-uy.
 Yes, C.-Gen.
 'Yes, Cheli's'
 b' *Ung, Cheli.
 Yes, C.
 'Yes, Cheli.' (Ahn & Cho 2015a:435)

Interestingly, (ib) and (ib') show the grammatical judgement parallel to their sentential connection, ((iib) and (iib')), respectively.

- (ii) a. Yenghi-ka emma-lul manna-ss-tay?
 Y.-Nom mother-Acc meet-Pst-Q_{hearsay}
 'Did Yenghi meet someone's mother?'
 b. Ung, Cheli-uy emma-i-a.
 Yes, C.-Gen mother-Cop-Dec
 'Yes, Yenghi met Cheli's mother'
 b' *Ung, Cheli-i-a.
 Yes, C.-Cop-Dec
 'Yes, It's Cheli.'

a small clause is a phase and that in a phase α with head H, the domain of H is not accessible to operations outside α , but only H and its edge (Chomsky's (2001) Phase Impenetrability Condition (PIC)), the element inside the phase can be accessible only when the phase extends in the ways shown in (52) (den Dikken 2006:113).

- (52) a. $[_{RP} DP [REALTOR+X_j [_{XP} t_j \dots]]]$
 b. $[_{FP} Spec [F+REALTOR_i [_{RP} DP [t_i [_{XP} Predicate]]]]]$

In (52a) the head of the small clause predicate is raised up to the Realtor-head. In (52b), the relator head moves up to a functional head. The head movement will make not just head but also its associated maximal projection visible to an outside probe. Hence, phase is extended, and apparent PIC violations can be obviated. We suggest that the similar phase extension takes place in (51) due to the head incorporation of the N into the copula. Thus, the apparent LBC violation does not occur in (51) on a par with (52).³⁰

29 This idea gains core insights from Baker's (1988) Government Transparency Corollary which basically states that heads inherit the governing domain of an incorporated element.

30 Our analysis may naturally be extended to other (apparent) island violations discussed in Park & Oh (2016) and An (2017).

Adnominal modifiers:

- (i) A: John-un nwu-ka ssu-n nonmwun-ul ilk-ess-ni?
 J.-Top who-Nom write-RC paper-Acc read-Pst-Q
 'Whose paper did John read?'
 B: Chomsky-ka ssu-n.
 C.-Nom write-RC
 B': Chomsky-ka.
 C.-Nom
 B'': Chomsky.
 'Intended reading: John read a paper that Chomsky wrote.'

Adjunct island:

- (ii) A: nwu-ka oki ceney John-i konghang-ey tochakha-ess-ni?
 who-Nom come before J.-Nom airport-at arrive-Pst-Q
 'Who did John arrive at the airport before _ came?''
 B: Chomsky-ka o-ki ceney.
 C.-Nom write-NM before
 B': Chomsky-ka.
 C.-Nom
 B'': Chomsky.
 'Intended reading: John arrived at the airport before Chomsky came.'

We propose that fragment answers in (i) and (ii) are derived from copula sources via move-and-delete upon incorporation of predicates or head nouns:

Our analysis can further capture the fact that some mono-syllabic adnominal modifiers cannot occur as fragments.³¹

- (53) a. Chelswu-ka haksayng-ul manna-ss-ni?
 C.-Nom student-Acc meet-Pst-Q
 ‘Did Chelswu meet a student?’

b. *Ung, i.
 yes, this.
 ‘Yes, he met this.’

- (54) a. Chelswu-ka cha-lul sa-ss-ni?
 C.-Nom car-Acc buy-Pst-Q
 ‘Did Chelswu buy a car.’

b. *Ung, hen.
 yes, old
 ‘Yes, he bought an old car.’

- (55) a. Chelswu-ka pwuin-ul manna-ss-ni?
 C.-Nom wife-Acc meet-Pst-Q
 ‘Did Chelswu meet a wife?’

b. *Ung, cen.
 Yes, former
 ‘Yes, he met a former wife.’

-
- (iii) B: [Chomsky-ka ssu-ni [TP [t_i-t_j] nonmwun_j-i-a]]-
 B’: [Chomsky-ka_i [TP [t_i-t_j-t_k] ssun_j-nonmwun_k-i-a]]
 B’’: [Chomsky_i [TP t_i-i-a]]-
 (iv) B: [Chomsky-ka oki ceney_i [TP t_i-i-a]]-
 B’: [Chomsky-ka_i [TP [t_i-t_j] oki ceney_j-i-a]]-
 B’’: [Chomsky_i [TP t_i-i-a]]

In sum, extractions out of TPs in (iii-iv) are all licit like fragments due to phase extension. Thus, there are no genuine island violations under our proposal, and no needs to postulate PF-islands or LF-islands contra Merchant (2001). However, there is one small difference between (iii) and (iv): *ssun-nonmwun* incorporation is “optional” while *oki-cen* incorporation is “obligatory” due to morphology.

31 A similar phenomenon in the right dislocation construction is noted in Lee (2009).

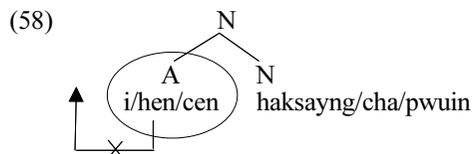
Under our analysis, fragments in (53-55) are all ruled out since their copula sentential sources shown in (56) are unacceptable.

- (56) a. *Ung, i-i-a.
 Yes, this-Cop-Dec
 ‘Yes, it was this.’
 b. *Ung, hen-i-a.
 Yes, old-Cop-Dec
 ‘Yes, it was old.’
 c. *Ung, cen-i-a.
 Yes, former-Cop-Dec.
 ‘Yes, it was former.’

The adnominal modifier fragments in (53-55) might have sentential sources like (57a-c), respectively.

- (57) a. Ung i haksayng-i-a.
 Yes, this student-Cop-Dec
 ‘Yes, it was this student.’
 b. Ung, hen cha-i-a.
 Yes, old car-Cop-Dec
 ‘Yes, it was an old car.’
 c. Ung, cen pwuin-i-a.
 Yes, former wife-Cop-Dec
 ‘Yes, it was a former wife.’

Although (57a-c) are well-formed, the fragmental counterparts in (53-55) aren't. We suggest that if (57) are sources of fragments in (53-55), the ill-formedness results from immobility of *i* ‘this’, *hen* ‘old’, and *cen* ‘former’, as shown in (58).



As shown in (58), *i* ‘this’, *hen* ‘old’, and *cen* ‘former’ are heads that resist extraction. When they move to Spec of C, the movement violates structure preserving principle since minimal projection X^0 becomes maximal projection XP. The ill-formedness of (53-55) due to illicit movement depicted in (58) lends another support to our claim that adnominal modifier fragments are derived via move-and-delete operations.

Note in passing that other short (mono-syllabic) adnominal modifiers can occur as fragments shown in (59-61).

(59) a. Chelswu-ka haksayng-ul manna-ess-ni?

C.-Nom student-Acc meet-Pst-Q

‘Did Chelswu meet students?’

b. Ung, twul.

Yes, two

(60) a. Chelswu-ka haksayng-ul manna-ess-ni?

C.-Nom student-Acc meet-Pst-Q

‘Did Chelswu meet students?’

b. Ung, seys.

Yes, three

(61) a. Chelswu-ka haksayng-ul manna-ess-ni?

C.-Nom student-Acc meet-Pst-Q

‘Did Chelswu meet students?’

b. Ung, ta.

Yes, all

The examples in (59-61) are expected to be legitimate since their sentential counterparts (62-64) are all well-formed:

(62) Ung, kuken twul-i-a.

Yes, it two-Cop-Dec

‘Yes, it was two.’

- (63) Ung, kuken seys-i-a.
 Yes, it three-Cop-Dec
 ‘Lit. Yes, it was three.’
- (64) Ung, *pro* ta-i-a. (*pro* = null expletive)
 Yes, all-Cop-Dec
 ‘Lit. Yes, it was all.’

Note that unlike the X^0 adnominal modifier class in (58), mono-syllabic quantifiers in (59-61) are XPs, and hence can undergo movement to Spec-C surviving copula TP-deletion. Thus, (59-61) can be properly derived from (62-64) via move-and-delete.³²

32 Soyoung Park (by p.c.) indicates that mono-syllabic fragments like (53-55)b are possible if they are employed as replies under “contrastive” contexts below (*mutatis mutandis* for the pairs such as *i/ce* ‘this/that’ and *hyen/cen* ‘present/ex’):

- (i) a. John-i say cha-lul sa-ss-ni?
 J.-Top new car-Acc Pst-Q
 ‘Did John buy a new car?’
 b. ani, hen.
 no old
 ‘No, an old one.’

We suggest that (i-b) is not derived from the ill-formed (ii-a) but from the well-formed (ii-b):

- (ii) a. *ani, hen-i-a.
 no, old-Cop-Dec
 b. ani, hen cha-i-a.
 no, old-Cop-Dec
 ‘No, it’s an old car.’

We tentatively suggest that (contrastively) focused terms must project to XP on independent grounds (see Hornstein et. al 2005:244 for related discussion). Then, XP *hen* ‘old’ in (ii-b) can be extracted out of TP as follows:

- (iii) hen_i [_{TP} [t_i t_j] cha_j -i-a].

The deviance of (ii-a), however, requires further explanation. Among many others, we assume two possibilities for the deviance in (ii-a): The copula *i* can c-select only NP or PP but not DP or AP; or it resists delimiter phrases including focalized phrases.

Note that the copula *i* resists case-marked pivots and other adnominal modifiers:

- (iv) a. *Yengi-uy/ka/lul-i-a.
 Y.-Gen/Nom/Acc-Cop-Dec

Our extended copula analysis of adnominal modifier fragments gains further supports from the following phenomenon. There are examples showing that the relation between modifier and its modified element seems to be important regarding well-formedness of adnominal modifier fragments, as shown in (65-67).

- (65) a. Chelswu-ka elkwul-ul ttayli-ess-ni?
 C.-Nom face-Acc hit-Pst-Q
 ‘Did Chelswu hit someone’s face?’
 b. Ung, Yenghi.
 Yes, Y.
 ‘Intended: Yes, it’s Yenghi.’
- (66) a. Chelswu-ka sonthop-ul kkakk-ass-ni?
 C.-Nom nail-Acc cut-Pst-Q
 ‘Did Chelswu cut someone’s nail?’
 b. ?Ung, Yenghi.
 Yes, Y.
 ‘Intended: Yes, it’s Yenghi.’
- (67) a. Chelswu-ka hakkyo-lul tanye-ss-ni?
 C.-Nom school-Acc go-Pst-Q
 ‘Did Chelswu go to school?’
 b. *Ung, Yenghi.
 Yes, Y.
 ‘Intended: Yes, it’s Yenghi.’

The acceptability of (65-67) parallels that of their copula sentential sources as shown in (68-70).

- (68) a. Chelswu-ka elkwul-ul ttayli-ess-ni?
 C.-Nom face-Acc hit-Pst-Q
 ‘Did Chelswu hit someone’s face?’

b. *yeppun-i-a
 pretty-Cop-Dec

Either way, we can exclude (ii-a) parallel to (iv).

- b. Ung, kuken Yenghi-i-a.
 Yes, it Y.-Cop-Dec
 ‘Yes, it’s Yenghi/Yenghi’s.’

- (69) a. Chelswu-ka sonthop-ul kkakk-ass-ni?
 C.-Nom nail-Acc cut-Pst-Q
 ‘Did Chelswu cut someone’s nail?’

- b. ?Ung, kuken Yenghi-i-a.
 Yes, it Y.-Cop-Dec
 ‘Yes, it’s Yenghi/Yenghi’s.’

- (70) a. Chelswu-ka hakkyo-lul tanye-ss-ni?
 C.-Nom school-Acc go-Pst-Q
 ‘Did Chelswu go to school?’

- b. *Yes, kuken Yenghi-i-a.
 Yes, it Y.-Cop-Dec
 ‘Yes, it’s Yenghi/Yenghi’s.’

In (68a) the possessor of *elkwul* ‘face’ is usually understood as non-Chelswu’s; while in (70a) *hakkyo* ‘school’ is strongly understood as Chelswu’s. In (69a), *sonthop* ‘nail’ is less preferred to be interpreted as non-Chelswu’s, but it is possible to be interpreted as non-Chelswu’s, too. Significant for our purposes here is parallelism between caseless fragments in (65-67) and copula constructions in (68-70).

Interestingly, however, when adnominal modifier fragments occur with *-uy*, the contrasts shown in (65-67) disappear, as shown in (71-73).

- (71) a. Chelswu-ka elkwul-ul ttayli-ess-ni?
 C.-Nom face-Acc hit-Pst-Q
 ‘Did Chelswu hit someone’s face?’

- b. Ung, Yenghi-uy.
 Yes, Y.-Gen
 ‘Yes, Yenghi’s.’

- (72) a. Chelswu-ka sonthop-ul kkakk-ass-ni?
 C.-Nom nail-Acc cut-Pst-Q
 ‘Did Chelswu cut someone’s nail?’
 b. Ung, Yenghi-uy.
 Yes, Y.-Gen
 ‘Yes, Yenghi’s.’
- (73) a. Chelswu-ka hakkyo-lul tanye-ss-ni?
 C.-Nom school-Acc go-Pst-Q
 ‘Did Chelswu go to school?’
 b. Ung, Yenghi-uy.
 Yes, Y.-Gen
 ‘Yes, Yenghi.’

The uniform well-formedness of adnominal modifier fragments in (71-73) is naturally explained due to the premise that their copula sentential sources in (74-76) are all well-formed contra (65-67).

- (74) a. Chelswu-ka elkwul-ul ttayli-ess-ni?
 C.-Nom face-Acc hit-Pst-Q
 ‘Did Chelswu hit someone’s face?’
 b. Ung, kuken Yenghi-uy elkwul-i-a.
 Yes, it Y.-Gen face-Cop-Dec
 ‘Yes, it was Yenghi’s face.’
- (75) a. Chelswu-ka sonthop-ul kkakk-ass-ni?
 C.-Nom nail-Acc cut-Pst-Q
 ‘Did Chelswu cut someone’s nail?’
 b. Ung, kuken Yenghi-uy sonthop-i-a.
 Yes, it Y.-Gen nail-Cop-Dec
 ‘Yes, it was Yenghi’s nail.’
- (76) a. Chelswu-ka hakkyo-lul tanye-ss-ni?
 C.-Nom school-Acc go-Pst-Q
 ‘Did Chelswu go to school?’

- b. Ung, kuken Yenghi-uy hakkyo-i-a.
 Yes, it Y.-Gen school-Cop-Dec
 ‘Yes, it was Yenghi’s school.’

Our analysis sheds further insights on the distribution of multiple fragments involving adnominal modifier fragments, as shown in (77).

- (77) a. Nwu-ka nwukwu-uy haksayng-ul manna-ss-ni?
 Who-Nom who-Gen student-Acc meet-Pst-Q
 ‘Who met whose student?’
 b. Chelswu-ka Yenghi-uy.
 C.-Nom Y-Gen
 ‘Chelswu met Yenghi’s student.’

Ahn & Cho (2017a) suggests that multiple fragments are instances of repetitive gapless right dislocation plus additional ellipsis involving in the host clause. Then, (77b) can be derived from a repetitive gapless right dislocation construction as shown in (78).

- (78) Chelswu-ka Yehngi-uy haksayng-ul manna-ss-e,
 C.-Nom Y.-Gen student-Acc meet-Pst-Dec
 kuken Yenghi-uy haksayng-i-a.
 it Y.-Gen student-Cop-Dec
 ‘Chelswu met Yenghi’s student, it was Yenghi’s student.’

(78) consists of two clauses, host and appendix. The host clause undergoes Merchant-style full clause ellipsis, while the appendix clause undergoes limited ellipsis involving a copula sentence, as shown in (79).

- (79) Chelswu-ka_i [~~t_i-Yehngi-uy-haksayng-ul manna-ss-e~~]
 Yenghi-uy_j [~~ku-ken t_j-haksayng-i-a~~]

Now, let us look at how our analysis accounts for ill-formed multiple fragments involving adnominal modifier shown in (80), as noted in Park & Kim (2015).

- (80) a. Nwukwu-uy haksayng-i nwukwu-lul manna-ss-ni?
 Who-Gen student-Nom who-Acc meet-Pst-Q
 ‘Whose student met whom?’
 b. *Yehngi-uy Chelswu-ul.
 Y-Gen C.-Acc
 ‘Yenghi’s student met Chelswu.’

We suggest that the sentential source of (80b) is (81b).

- (81) a. Nwukwu-uy haksayng-i nwukwu-lul manna-ss-ni?
 Who-Gen student-Nom who-Acc meet-Pst-Q
 ‘Whose student met whom?’
 b. *Kuken Yenghi-uy haksayng-i-a,
 it Y-Gen student-Cop-Dec
 Yenghi-uy haksayng-i Chelswu-ul manna-ss-e.
 Y.-Gen student-Nom C.-Acc meet-Pst-Dec
 ‘It was Yenghi’s student, Yenghi’s student met Chelswu.’

The host clause in (80) is infelicitous as an answer to the question, as shown in (82) while the host clause in (77) is felicitous as an answer to the question, as shown in (83).

- (82) a. Nwukwu-uy haksayng-i nwukwu-lul manna-ss-ni?
 Who-Gen student-Nom who-Acc meet-Pst-Q
 ‘Whose student met whom?’
 b. *Kuken Yenghi-uy haksayng-i-a.
 it Y-Gen student-Cop-Dec
 ‘It was Yenghi’s student.’
 (83) a. Nwu-ka nwukwu-uy haksayng-ul manna-ss-ni?
 Who-Nom who-Gen student-Acc meet-Pst-Q
 ‘Who met whose student?’
 b. Chelswu-ka Yehngi-uy haksayng-ul manna-ss-e.
 C.-Nom Y.-Gen student-Acc meet-Pst-Dec
 ‘Chelswu met Yenghi’s student.’

Following Ahn & Cho (2017a), we argue that the restriction on multiple fragments is explained as a result of syntactic and semantic completeness of the host clause.³³ In (77) and (80), the crucial difference between licit and illicit multiple fragments hinges on the felicity of the host clauses that underlie the first fragment answers, as shown in (82-83). Thus, our extended copula analysis of adnominal modifier fragments gains additional supports from the distribution of multiple fragments.

5. Against Alternative Analyses

In this section, we briefly discuss Park (2015) and An (2016), alternative uniform analyses of two types of fragments. Park (2015) (along with Ahn & Cho 2006) suggests that case-marked and caseless fragments can be derived from the same sentential source. Park (2015:837) discusses examples related to Chung's generalization, as shown in (84b-85b).

- (84) a. Na-nun nwukwunka-eykey nonmwun-ul ponay-ss-e.
 I-Top someone-Dat paper-Acc send-Pst-Dec
 'I sent someone the paper.'
 b. nwukwu?
 who (Park 2015:837)
- (85) a. na-nun nonmwun-ul ponay-ss-e.
 I-Top paper-Acc send-Pst-Dec
 'I sent someone the paper.'
 b. ?*nwukwu?
 who (Park 2015:837)

Park (2015) assumes that (matrix sluicing) fragments in (84-85) share the same sentential source like (86).

- (86) nwukwu_i [_{TP} ney-ka t_i-eykey nonmwun-ul ponay-ss-ni]

Without TP-deletion (86) is ill-formed. Park (2015) assumes that ban on case

³³ Ahn & Cho (2016) indicates that the assertion part of the RDCs is the first host clause, and hence the host clause itself is solely responsible for an answer to the question.

marker/P-stranding in Korean is a PF constraint and deletion saves the case marker stranding violation. Then, a question arises as to why the same stranding-under-ellipsis strategy can't save the fragment in (85b). Park (2015) assumes that ellipsis requires the presence of linguistic antecedent. Since deleting a stranded case marker requires overt presence of its corresponding case marker in the antecedent clause to satisfy an identity condition on ellipsis, the stranding-under-ellipsis strategy does not apply in (85b).

This analysis raises a non-trivial conceptual question as to nature of P-stranding violation. Under the analysis advanced by Park (2015), the violation observed in (84) seems to be representational, which can be mitigated later. However, under Merchant's (2004) analysis, it seems to be derivational, which cannot be mitigated later. It is unclear that one constraint is derivational in some languages but it is representational in other languages. It does not seem to be on the right track to assume that one constraint is subject to parametric variation.

In addition, Park (2015) encounters the following empirical problem, as shown in (42), repeated here as (87).

- (87) a. Bill-i nwukwu-lul-wuihayse nolay-lul pwul-ess-ni?
 B.-Nom who-Acc-for song-Acc sing-Pst-Q
 'For whom did Bill sing a song?'
 b. Mary-lul-wuihayse.
 M.-Acc-for
 'For Mary'
 c. *Mary-lul.
 M.-Acc
 'For Mary' (Park 2005a, fn. 9)
 d. Mary.
 M.

On the view, (87c) has the structure like (88).

- (88) Mary-lul_i [_{TP} Bill-i t_i-wuihayse nolay-ul pwul-ess-ta]

Since ban on case marker/P-stranding in Korean is a PF constraint and deletion saves the case marker stranding violation, (88) is predicted to be well-formed after TP deletion under Park's analysis, contrary to fact.

Furthermore, it is not clear how asymmetrical behaviors concerning island violation is captured on this view; that is, why PF-deletion saves (or doesn't save) island violation in (16), repeated here as (89).

- (89) a. Kyengcal-i mwusun cha-lul hwumchi-n totwuk-ul cap-ass-ni?
 police-Nom what car-Acc steal-RC thief-Acc catch-Pst-Q
 'For what car, did the police catch the thief who stole it?'
 b. *Sonata-lul.
 S.-Acc.
 b'. Sonata.

A detailed explanation is needed as to why repair-strategy via ellipsis cannot save the above ill-formed example (89b) under Park's account.

Furthermore, Park (2015) may not explain the contrasts among adnominal modifier fragments concerning modifier-modified relation given in (65-67), repeated here as (90-92).

- (90) a. Chelswu-ka elkwul-ul ttayli-ess-ni?
 C.-Nom face-Acc hit-Pst-Q
 'Did Chelswu hit someone's face?'
 b. Ung, Yenghi.
 Yes, Y.-Gen
 'Yes, Yenghi's.'
- (91) a. Chelswu-ka sonthop-ul kkakk-ass-ni?
 C.-Nom nail-Acc cut-Pst-Q
 'Did Chelswu cut someone's nail?'
 b. ?Ung, Yenghi.
 Yes, Y.
 'Yes, Yenghi's.'
- (92) a. Chelswu-ka hakkyo-lul tanye-ss-ni?
 C.-Nom school-Acc go-Pst-Q
 'Did Chelswu go to school?'

- b. *Ung, Yenghi.
 Yes, Y.
 ‘Yes, Yenghi’s.’

An (2016) also suggests that the two types of fragments are derived from the same sentential source, and hence a uniform analysis of two types of fragments. An’s PF-deletion (or Extra Deletion) analysis, however, is subject to similar problems as Park’s. Put differently, on An’s analysis, it is not clear why the two types fragments display asymmetrical behaviors concerning island violation; that is, why PF-deletion (or Extra Deletion) saves (89b’) but doesn’t save island violation in (89b), and the like.

An (2016) may also encounter a non-trivial problem in accounting for the contrast among (87b-d). Under An’s (2016) analysis, (87b-d) have the representations like (93a-c), respectively.

- (93) a. Mary-lul-wuihayse_i [_{TP} Bill-i t_i nolay-ul pwul-ess-ta]
 b. Mary-lul-wuihayse_i [_{TP} Bill-i t_i nolay-ul pwul-ess-ta]
 c. Mary-lul-wuihayse_i [_{TP} Bill-i t_i nolay-ul pwul-ess-ta]

Under An’s Extra Deletion analysis, (93b) is predicted to be well-formed like Park (2015), contrary to fact.

An (2016) further faces a non-trivial problem in accounting for adnominal fragments. For example, adnominal modifiers are derived from full clauses not from copula constructions, as shown in (94).

- (94) a. [[Cheli-uy emma-lul]_i [Yenghi-ka t_i manna-ss-e]]
 b. [[Cheli-uy emma-lul]_i [Yenghi-ka t_i manna-ss-e]]

This type of analysis cannot capture the contrasts in (90-92) like Park (2015).³⁴

34 Perhaps An’s/Park’s and our analysis can be reconciled if they assume that some of the underlying sentential sources of caseless fragments are copula constructions (Park indeed explores some possibilities along this lines in his previous work). However, in this case, the numerous questions arise: First of all, it is not clear which caseless fragments underlie full sentential sources or copula constructions prior to Extra Deletion for An, and repair-by-ellipsis for Park.

6. Concluding Remarks

We have examined two types of fragments in Korean, case-marked and caseless fragments. We propose that both case-marked and caseless fragments have sentential sources. However, we indicate that their sentential sources are not identical. We suggest that case-marked fragments are derived from full clausal ellipsis, whereas caseless fragments are derived from reduced copula constructions (“limited” ellipsis). We have shown that parallel behaviors of the two types of fragments concerning Albert’s generalization are due to their elliptical nature, while non-parallel behaviors of them regarding Chung’s generalization and island violation asymmetry hinge essentially upon their distinct sentential sources. Neither uniform nor previous hybrid approaches to the two types of fragments can capture the contrasts that we have demonstrated. Furthermore, our hybrid ellipsis analysis is able to offer fresh accounts for ill-understood and mal-explained phenomena concerning adnominal modifier fragments in Korean via uniform move-and-delete analysis of them.

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